

# Work Order ID 70221

Tuesday, May 31, 2011 3:23:35 PM



Page 1

Item ID: D412-702-027

Accept



Setup Start



Revision ID:

Stop



Item Name: 4-Man Side Facing Shoulder Harness, 4 point

Start Date: 5/31/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 6/1/2011 Req'd Qty: 1.00



Customer:

*Ship tomorrow  
Janet 1st*

Reference:

Run Start



Approvals: Process Plan: *MF*

Date: *11-05-31*

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
IIN-D412-702	E

100

0.00



DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile and create labels per PPP D412-702-027 CHG002

*8 labels  
MR 11-05-31*

110

0.00



Pick Kit

Packaging

Memo

0.00

Packaging

*11/5/31 SD*

120

0.00



QC4- 100% Inspect kits for completeness

QC

Memo

0.00

Quality Control

*8 labels*

*(24)*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**Work Order ID 70221**

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Item ID: D412-702-027

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Setup Start



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Item Name: 4-Man Side Facing Shoulder Harness, 4 point

Start Date: 5/31/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 6/1/2011 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 	Packaging	0.00							
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D412-702-027 Location: <u>5a</u>								
	<u>NEU13</u>								
140 	QC21- Final Inspection - Work Order Release	0.00							
QC	Memo	0.00							
Quality Control									

P41/06/01CK 11/06/01ME11-06-01

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries




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**Abstract**

**Required Qty: 1.00**

**Comments:** IPP A 05.09.01 New issue KJ/JLM  
IPP Rev:B 06.04.03 As per DS19324 JLM  
IPP Rev:C As per Dsi9351 07-03-14 JLM  
IPP Rev:D 07-07-28 As per Rev E JLM Verified By:EC  
IPP Rev:E Remove Manufact 08-05-13 JLM Verified By:DD  
IPP Rev F 11.05.31 dsi 9559 EC verified by: JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4387-041  Harness Assembly		Manufactured	No			110	Each	51.0000	4	4			
				<u>Location</u>									
				ST263				51					
				70053				24					
				70055				27					
D412-702-069  Grommet		Manufactured	No			110	Each	3.0000	1	1			
				<u>Location</u>									
				FG122				3					
				62206				3					
D3196-3  Bar		Manufactured	No			110	Each	2.0000	1				
				<u>Location</u>									
				ST260				2					
				67794				2					



# Picklist Print

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Work Order ID: 70221

Parent Item: D412-702-027

Parent Item Name: 4-Man Side Facing Shoulder Harness, 4 point

Start Date: 5/31/2011

Required Date: 6/1/2011

Start Qty: 1.00

Required Qty: 1.00

D3196-4

Manufactured No

110 Each

3.0000



Bar



1  
5/31

Location

Loc Qty

Loc Code

ST260

3

67740

3

D3551-11

Manufactured No

110 Each

17.0000



Hook and Loop Tie



4  
5/31

Location

Loc Qty

Loc Code

ST246A

17

68427

17

MS24694-S152

Purchased No

110 Each

61.0000



Screw



6  
5/31

Location

Loc Qty

Loc Code

ST289A

61

116440

61

MS24694-S154

Purchased No

110 Each

50.0000



SCREW



1  
5/31

Location

Loc Qty

Loc Code

ST290

50

116328

8

117601

42


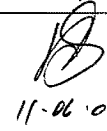
Pto ->

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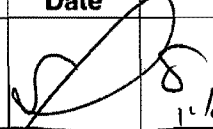


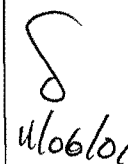
Shop Packet Print

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Dart Aerospace Ltd

W/O: 70221		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
11/06/01	110	Perm change for MS24694-S154 to qty 6.					 11-06-01

Part No: D412-702-007 PAR #: \_\_\_\_\_ Fault Category: Production Engineering NCR: Yes No DQA: 11 Date: 11.06.01  
 Resolution: Revised Disposition: Revised QA: N/C Closed: 11/06/01 Date: 11/06/01

NCR: 70221		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
11/6/01	# 110	wrong qty for MS24694-S154 Should be Qty x6 per kit R.G. who is wrong LOA	 CPT/12	→ ADD correct Amount to Kit  → update w/o + Bom. ADD copy of Bom for Ref	 11.06.01	 11/06/01		 11/06/01

NOTE: Date & initial all entries



QTY -021	QTY -023	QTY -025	QTY -027	QTY -029	QTY -035	Part Number	Description
X						D412-702-021	Dart 13-Man Shoulder Harness Kit, 4-point
	X					D412-702-023	Dart 5-Man Forward Facing Shoulder Harness Kit, 4-point
		X				D412-702-025	Dart 4-Man Aft Facing Shoulder Harness Kit, 4-point
			X			D412-702-027	Dart 4-Man Side Facing Shoulder Harness Kit, 4-point
				X		D412-702-029	Dart 1-Man Forward Facing Shoulder Harness Kit, 4-point
					X	D214-702-035	Dart 5-Man Aft Facing Shoulder Harness Kit, 4-point, for Bell 214B/B-1
1	1		1	1		D412-702-069	GROMMET KIT
2	2					D3195-041	BRACKET
2	2					D3195-043	BRACKET
1	1			1		D3196-1	BAR
1			1			D3196-3	BAR
1			1			D3196-4	BAR
2	2					D3197-041	BAR
4		4				D3198-1	FITTING
2	2					D3268-1	PLACARD
9	5		4	1		D3446-041	HARNESS ASSEMBLY, 4 POINT
4		4				D3446-043	HARNESS ASSEMBLY, 4 POINT
					5	D3446-045	HARNESS ASSEMBLY, 4 POINT
13	5	4	4	1	5	D3551-11	HOOK AND LOOP TIE
2	2					D3546-1	CLIP
4		4				AN4-5A	BOLT
4	4					AN4-13A	BOLT
8		8				AN4-20A	BOLT
20		20				AN960JD416	WASHER (OR NAS1149D0463J)
12		12				MS21042L4	NUT (OR MS21042-4)
8	2		6	2		MS24694-S152	SCREW
8	2		6	2		MS24694-S154	SCREW

QTY -069	Part Number	Description
X	D412-702-069	GROMMET KIT
24	D3619-2	GROMMET
1	D3619-2T1	HOLE PUNCH
1	D3619-2T2	STRIKER BLOCK
1	D3619-2T3	PUNCH
1	D3619-2T4	DIE



# **DART SERVICE INSTRUCTION**

TO AMEND IIN-D412-702-1 REV. A,  
AND ICA-D412-702 REV. 4 OR EARLIER APPROVED REVISIONS  
REF. TCCA STC: SH04-7  
REF. FAA STC: SR01997NY  
REF. EASA STC: EASA.IM.R.S.00710

**REFERENCE ONLY**

## **PURPOSE**

The purpose of this DSI is to outline the replacement of existing D3446-041/-043 Shoulder Harnesses with the new and improved D4387-041/-043 Shoulder Harnesses.

## **CHANGE**

For the following Kits, the D4387-041 and D4387-043 Shoulder Harnesses respectively replace the D3446-041 and D3446-043 Shoulder Harnesses as follows:

Old Harness P/N	Used On	New Harness P/N	Effectivity
D3446-041	D412-702-021	D4387-041	CHG 003 and subsequent
	D412-702-023		CHG 002 and subsequent
	D412-702-027		CHG 002 and subsequent
	D412-702-029		CHG 002 and subsequent
D3446-043	D412-702-021	D4387-043	CHG 003 and subsequent
	D412-702-025		CHG 002 and subsequent






Customers who want to upgrade their shoulder harnesses may replace their existing D3446-041/-043 with D4387-041/-043 per this service instruction.

CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

APPROVED

BY:   
D. SHEPHERD (DE # 02)

DATE: 11.05.09  
CERT. NO.: SH04-7  
ISSUE NO.: 3

A	NEW ISSUE	MB	11.05.09
REV.	DESCRIPTION	BY	DATE
DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9559	SHEET 1 OF 1
APPROVED		TITLE	SCALE
DE APPR.		HARNESS CHANGE	NTS
DATE	11.05.09	COPYRIGHT © 2011 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

